

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.: MO-0107077

Owner: Kay – Clo Enterprises
Owner's Address: 117 Blessing Lane, Kimberling City, MO 65686

Operating Authority: Kay Renfro
Operating Authority's Address: Same as above

Facility Name: Renfro's Sanitary Landfill
Facility Address: Lake Road 13-4, Reeds Spring, MO 65737

Legal Description: NW ¼, NE ¼, Sec. 14, T23N, R23W, Stone County
Latitude/Longitude: +3642109 / -9323216

Receiving Stream: Tributary to South Aunt's Creek (U)
First Classified Stream and ID: Table Rock Lake (L2) (07313)
USGS Basin & Sub-Watershed Number: (11010002-070001)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfall #001 – Closed Landfill – SIC#4953
Design flow is 7.9 MGD.

Outfall #002 – has been eliminated

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

July 15, 2005
Effective Date

July 14, 2010
Expiration Date
MO 780-0041 (10-93)

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Edward Galbraith, Director of Staff, Clean Water Commission

Legal Description

Outfall #001 – NW, $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 11, T23N, R23W, Stone County

Outfall #002 – This outfall has been eliminated

West Wall Seep – NW $\frac{1}{4}$, SW $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 11, T23N, R23W, Stone County
Monitoring Point

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 9	
					PERMIT NUMBER MO-0107077	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfalls #001</u> (Note 1)						
Flow	MGD	*		*	once/quarter	24 hr. estimate
BETX	mg/L	0.75		0.75	once/quarter**	grab
Biochemical Oxygen Demand	mg/L	60		45	once/quarter**	grab
Chemical Oxygen Demand	mg/L	120		90	once/quarter**	grab
Total Suspended Solids	mg/L	80		60	once/quarter**	grab
Settleable Solids	mg/L	1.5		1.0	once/quarter**	grab
Total Dissolved Solids	mg/L	*		*	once/quarter**	grab
Conductivity(Specific Conductance)	micromhos/ cm 25 C	*		*	once/quarter**	grab
Chloride Plus Sulfates	mg/L	1000		*	once/quarter**	grab
Nitrate as N	mg/L	*		*	once/quarter**	grab
pH – Units	SU	***		***	once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2005</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 4 of 9	
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		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>West Wall Seep</u>	Note 2					
Flow	MGD	*		*	once/year**	24 hr. estimate
BETX	mg/L	*		*	once/year**	grab
Chemical Oxygen Demand	mg/L	*		*	once/year **	grab
Total Dissolved Solids	mg/L	*		*	once/ year**	grab
Conductivity (Specific Conductance)	micromhos/ cm 25 C	*		*	once/year**	grab
Nitrate as N	mg/L	*		*	once/year**	grab
Chloride Plus Sulfates	mg/L	*		*	once/year**	grab
pH – Units	SU	****		****	once/year**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2006</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT OT THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

* Monitoring requirement only.

** Sample once per quarter in the months of March, June, September, and December.

*** Grab samples shall be collected during a rainfall event, when there is runoff from the landfill site. The sample shall be collected no later than one hour after runoff begins.

**** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

Note 1 – Quarterly report due for this reissued permit is based on a complete calendar four (4) quarter monitoring period.

Note 2 – The West Wall seep is included to monitor for the presence and movement of potential groundwater contaminants.

C. SPECIAL CONDITIONS

1. The permittee shall maintain a Storm Water Pollution Prevention Plan (SWPPP) in lieu of the proposed sedimentation basin. The SWPPP shall be available on site.

The SWPPP shall:

- (a) Incorporate required practices identified below,
- (b) Incorporate erosion control practices specific to site conditions, and
- (c) Provide for maintenance and adherence to the plan.
- (d) Also meet approval of the Solid Waste Management Program permitting requirements.

The permittee shall fully implement the provisions of the SWPPP required under this part as a condition of this permit throughout the term of the landfill closure.

The purpose of the SWPPP is to ensure the design, implementation, management, and maintenance of “Best Management Practices” (BMPs) in order to reduce the amount of sediment and other pollutants in storm water discharges associated with the landfill closure; comply with the Missouri Water Quality Standards; and ensure compliance with the terms and conditions of this permit.

The permittee shall select, install, use, operate, and maintain the BMPs in accordance with the concepts and methods described in either of the following two documents:

- (a) ***Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices***, (Document number EPA 832-R-92-005) published by the United States Environmental Protection Agency (USEPA) in September 1992.
- (b) ***Protecting Water Quality: A field guide to erosion, sediment and storm water best management practices for development sites in Missouri***, published by the Missouri Department of Natural Resources in November 1995.

The permittee is not limited to the use of these guidance manuals. Other commonly accepted publications may be used for guidance and must be referenced in the SWPPP if used. In addition, the permittee is not limited to the use of BMPs identified in these manuals. However, any alternative BMPs should be justified by site conditions and described in the SWPPP.

2. SWPPP Requirements:

The following information and practices shall be provided for in the SWPPP.

- (a) Site Description. In order to identify the site, the SWPPP shall include the facility and outfall information provided in the Application Form. The SWPPP shall have sufficient information to be of practical use to contractors and site construction workers to guide the installation and maintenance of BMPs.
- (b) Drainage areas: The following guidelines are for protection of drainage areas and shall be addressed in the SWPPP.
 - (1) Clearing and grubbing within 50 feet of a defined drainage course should be avoided. If the disturbed area is near a Valuable Resource Water as defined under “Applicability to Valuable Resource Waters”, clearing and grubbing within 50 feet of a defined drainage course must be avoided to protect water quality functions unless replacement vegetation is sufficient to protect water quality and is specified in the SWPPP.
 - (2) Where changes to defined drainage courses occur as part of the project, clearing and grubbing within 50 feet of the defined drainage course should be delayed until all materials and equipment necessary to protect and complete the drainage change are on site.
 - (3) Changes to defined drainage courses shall be completed as quickly as possible once the work has been initiated. The area impacted by the land disturbance of the drainage course change is to be revegetated or protected from erosion as soon as possible. Areas within 50 feet of defined drainage ways should be recontoured as needed and revegetated, seeded, or otherwise protected within five (5) working days after grading has ceased.
 - (4) Work in defined drainages or water courses and their associated wetlands may require a permit from the U.S. Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act.

C. SPECIAL CONDITIONS (continued)

2. SWPPP Requirements: (continued)

- (c) Description of Best Management Practices: The SWPPP shall include a description of the BMPs that will be used at the site. The SWPPP shall provide the following general information for each BMP which will be used one or more times at the site:
- (1) Physical description of the BMP,
 - (2) Site and physical conditions that must be met for effective use of the BMP,
 - (3) BMP installation/construction procedures, including typical drawings, and
 - (4) Operation and maintenance procedures for the BMP.

The SWPPP shall provide the following information for each specific instance where a BMP is to be installed:

- (1) Whether the BMP is temporary or permanent,
 - (2) Where, in relation to other site features, the BMP is to be located,
 - (3) When the BMP will be installed in relation to each phase of the land disturbance procedures to complete the project, and
 - (4) What site conditions must be met before removal of the BMP if the BMP is not a permanent BMP.
- (d) Disturbed Areas: Slopes for disturbed areas must be defined in the SWPPP. Where soil disturbing activities cease in an area for more than 14 days, the disturbed areas shall be protected from erosion by stabilizing the area with mulch or other similarly effective erosion control BMPs. If the slope of the area is greater than 3:1 or if the slope is greater than 3% and greater than 150 feet in length, then the disturbed areas shall be protected from erosion by stabilizing the area with mulch or other similarly effective erosion control BMPs if activities cease for more than seven days. These requirements do not apply to the interior slopes of a sedimentation basin or the areas that clearly drain thereto.
- (e) Installation: The permittee shall ensure the BMPs are properly installed at the locations and relative times specified in the SWPPP. Peripheral or border BMPs to control runoff from disturbed areas shall be installed or marked for preservation before general site clearing is started. Storm water discharges from disturbed areas which leave the site shall pass through an appropriate impediment to sediment movement, such as a sedimentation basin, sediment traps, silt fences, etc. prior to leaving the land disturbance site. Bench marks shall be referenced for proper installation and operation and maintenance of drainage course changes.
- (f) Temporary and Permanent Non-Structural BMPs: The SWPPP shall require existing vegetation to be preserved where practical. The time period for disturbed areas to be without vegetative cover is to be minimized to the extent practical.

Examples of non-structural BMPs which the permittee should consider specifying in the SWPPP include: preservation of trees and mature vegetation, protection of existing vegetation for use as buffer strips (especially along drainage courses), mulching, sodding, temporary seeding, final seeding, geotextiles, stabilization of disturbed areas, preserving existing stream channels as overflow areas when channel straightening or shortening is allowed, soil stabilizing emulsions and tackifiers, mulch tackifiers, stabilized site entrances/exits, and other appropriate BMPs.

Temporary and Permanent Structural BMPs: Examples of structural BMPs that the permittee should consider specifying in the SWPPP include: diverting flows from undisturbed areas away from disturbed areas, silt (filter fabric or straw bale) fences, earthen diversion dikes, drainage swales, sediment traps, rock check dams, subsurface drains (to gather or transport water for surface discharge elsewhere), pipe slope drains (to carry concentrated flow down a slope face), level spreaders (to distribute concentrated flow into sheet flow), storm drain inlet protection and outlet protection, reinforced soil retaining systems, gabions, temporary or permanent sediment basins, and other appropriate BMPs.

C. SPECIAL CONDITIONS (continued)

2. SWPPP Requirements (continued)

- (g) Additional Site Management BMPs: The SWPPP shall address other BMPs, as required by site activities, to prevent contamination of storm water runoff. Such BMPs include:
 - (1) Solid and hazardous waste management including: providing trash containers and regular site clean up for proper disposal of solid waste such as scrap building material, product/material shipping waste, food containers, and cups; and providing containers and proper disposal of waste paints, solvents, and cleaning compounds, etc.;
 - (2) Storage of construction materials away from drainage courses and low areas; and
 - (3) Installation of containment berms and use of drip pans at petroleum product and liquid storage tanks and containers.
- (h) Permanent Storm Water Management: The SWPPP shall include a description of the measures that will be installed during land disturbance to control pollutants in storm water discharges that will occur after land disturbance activity has been completed. These could include drainage channels or systems; outlet control devices, detention basins, oil water separators, catch basins, etc.

3. Amending/Updating the SWPPP:

The permittee shall amend and update the SWPPP as appropriate during the term of the landfill closure. The permittee shall amend the SWPPP, at a minimum, whenever the:

- (a) Design, operation, or maintenance of BMPs is changed;
- (b) Design of the project is changed that could significantly affect the quality of the storm water discharges;
- (c) Permittee's inspections indicate deficiencies in the SWPPP or any BMP;
- (d) MDNR notifies the permittee of deficiencies in the SWPPP;
- (e) SWPPP is determined to be ineffective in significantly minimizing or controlling erosion and sedimentation (e.g., there is visual evidence, such as excessive site erosion or excessive sediment deposits in streams or lakes);
- (f) Non-Filterable Residues (NFR) from a storm water outfall exceed 60 mg/l;
- (g) Total Settleable Solids from a storm water outfall exceed 1.0 ml/L/hr.
- (h) MDNR determines violations of Water Quality Standards may occur or have occurred.

C. SPECIAL CONDITIONS (continued)

4. Site Inspections:

The permittee shall ensure the landfill closure site is inspected on a regular schedule and within a reasonable time period (not to exceed 72 hours) following heavy rains. Regularly scheduled inspections shall be at a minimum once per month. For disturbed areas that have not been finally stabilized, all installed BMPs and other pollution control measures shall be inspected for proper installation, operation and maintenance. Locations where storm water leaves the site shall be inspected for evidence of erosion or sediment deposition. Any deficiencies shall be noted in a report of the inspection and corrected within seven calendar days of the inspection.

A log of each inspection shall be kept. The inspection report is to include the following minimum information: inspector's name, date of inspection, observations relative to the effectiveness of the BMPs, actions taken or necessary to correct deficiencies, and listing of areas where landfill closure operations have permanently or temporarily stopped. The inspection report shall be signed by the permittee or by the person performing the inspection if duly authorized to do so.

5. Proper Operation and Maintenance:

The permittee shall at all times maintain all pollution control measures and systems in good order to achieve compliance with the terms of this permit.

The need to halt or reduce the permitted activity in order to maintain compliance with permit conditions shall not be a defense to the permittee in an enforcement action.

6. All outfalls must be clearly marked in the field.

7. This permit may be reopened and modified, or alternatively revoked and reissued, to:

- (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
- (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
- (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

C. SPECIAL CONDITIONS (continued)

8. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 ug/L);
 - (2) Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

9. Report as no-discharge when a discharge does not occur during the report period.

10. General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:

- (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
- (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
- (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
- (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
- (e) There shall be no significant human health hazard from incidental contact with the water;
- (f) There shall be no acute toxicity to livestock or wildlife watering;
- (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
- (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

11. All design and operating specifications and all Solid Waste Management Program approval conditions pertaining to water quality are hereby made a part of this permit and shall apply throughout the life of this permit without regard to other conditions, permits occurrences, etc.

12. This permit does not allow the discharge of storm water that has contacted the open face of the landfill. This permit does not allow the discharge of untreated leachate. All leachate shall be handled in accordance with the Solid Waste Disposal Area Operating Permit, Report of Approval of Plans and Specifications (with conditions)

D. SCHEDULE OF COMPLIANCE

By May 15, 2005 the east and west barren areas must be seeded, fertilized, limed, and mulched.